

REMARKS

Claims 1-11 have been amended. Claims 1-11 remain for further consideration. No new matter has been added.

The rejections shall be taken up in the order presented in the Official Action.

4-5. Claims 1-4 and 6-10 currently stand rejected for allegedly being anticipated by the subject matter disclosed in U.S. Patent 4,031,377 to Deutsch (hereinafter "Deutsch").

Claims 1 and 7 recite a computing device on a *monolithic integrated* circuit for multiplying together a digitized multiplier signal value and a digitized multiplicand signal value. The Official Action contends that Deutsch discloses "*a computing unit on a monolithic integrated circuit...*". (Official Action, pg. 3). However, it is respectfully submitted that a fair and proper reading of Deutsch fails to reveal that the device is located on a monolithic integrated circuit. Deutsch appears to be a combination of discrete components that are NOT all located on a monolithic integrated circuit. In addition, the system of Deutsch is not a clocked system, which tends to further indicate that the system is not located on a monolithic integrated circuit.

The systems of claims 1 and 7 also recite first means for bi-directionally shifting and second means for bi-directionally shifting. The first and second means for bi-directionally shifting provide first and second shifted signals, respectively, which are summed to provide a summed signal value that is indicative of the product of the multiplier and the multiplicand. In contrast, Deutsch fails to disclose bi-directional shifting. As shown in FIG. 1 of Deutsch, the shifters 12, 13 are merely left shifters – NOT bi-directional shifters as recited in claim 1.

A §102 rejection requires that a single reference teach each and every element of the claimed invention. Deutsch fails to disclose that the circuit is located on a monolithic integrated circuit. IN

addition, Deutsch fails to disclose means for bi-directional shifting as recited in claim 1. Therefore, it is respectfully submitted that Deutsch is incapable of anticipating claims 1 and 7.

5-6. Claims 5 and 11 currently stand rejected under 35 U.S.C. §103 in view of the combined subject matter disclosed in Deutsch in view of U.S. Patent 5,402,369 to Main (hereinafter "Main").

It is respectfully submitted that this rejection is now moot, since claims 1 and 7 are patentable for at least all the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 1-11 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



Patrick J. O'Shea
Registration No. 35,305
Gauthier & Connors LLP
225 Franklin Street, Suite 3300
Boston, Massachusetts 02110
Telephone: (617) 426-9180 x121